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## **Time to Harness the Power All Around Us**

*Millions of Dollars Available Now to Help You Install Renewable Energy*

*by*  
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While traditional sources of electricity are convenient, the cost can be staggering. Not only monetarily, but environmentally, too. Most electricity used in the United States comes from burning fossil fuels, a major source of air pollution. It's a global problem, but changing the way we generate electricity locally can prevent it. By leveraging the infinite energy sources around us, like the sun or wind, Americans can maintain the convenience we've become accustomed to, while preventing pollution.

The natural or "renewable" energy of the sun and wind is found on homes and commercial buildings across the country. Simply, renewable energy systems such as solar panels and wind turbines harness the power of the sun and wind to create reliable, clean electricity.

The time for installing a renewable energy system has never been better. There are millions of dollars available through rebates from state and utility-sponsored programs, and tax incentives from the state and federal governments. If more people knew how simple it is to follow their lead, energy crises would soon be curtailed.

There are two systems that are most appropriate for residential and small commercial use: 1) Solar or photovoltaic, known commonly as PV, and, 2) wind turbine.

**Solar or Photovoltaic (PV).** Solar electricity, or PV, captures the sun's energy to generate electricity. Photovoltaic cells have been around for decades, and can be found on a wide array of buildings including businesses, schools, churches and homes. And like most things involving technology, as the cost to produce PV systems has decreased, their efficiency has increased.

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For PV to work, the building must have unobstructed access to the sun. South-facing rooftop exposure is best, but roofs facing east and west can also be used. PV systems can also be mounted on the ground.

In California and 35 other states across the country, residents can take advantage of “net metering.” When an installed PV system produces more electricity than used, the excess electricity is sold back to the local utility, spinning the electric meter backwards, and resulting in a “credit” toward the resident’s future electricity purchases.

Homeowner Torkil Olsen of Los Altos Hills, CA was the first in his community to install a PV system. “I wanted to reduce pollution ... period,” he states. With a \$5,700 rebate from the California Energy Commission, he purchased a system that generates 3,000 kilowatt hours annually, about half his home’s annual use.

**Wind Turbine.** Wind-generated power is typically used for agriculture or by utilities as part of the “green power” they offer to customers. However, some home and commercial building owners are choosing to install small-scale wind systems to generate their own clean energy. A wind system is not appropriate for everyone, but should be considered by those who live on suitable sites in areas with consistent wind patterns.

There are reputable contractors available in most states that are familiar with local zoning laws and can do the entire job, including overseeing the processes for permits and rebates. To learn more about the rebates and tax incentives available in California or your area, renewable energy or to find a contractor visit [www.consumerenergycenter.org/renewable](http://www.consumerenergycenter.org/renewable).

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